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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/852,974	05/10/2001	Alan Torr	10965/3	4932

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EXAMINER

JAGAN, MIRELLYS

ART UNIT PAPER NUMBER

2859

DATE MAILED: 06/14/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/852,974

Applicant(s)

TORR, ALAN

Examiner

Mirellys Jagan

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-11,13-15,17,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 3,7,12,16 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-18 are objected to because of the following informalities:

Claims 1 and 17: There is lack of antecedent basis in the claim for "said clamping face" in lines 11-12, respectively.

Claims 1 and <sup>1</sup>12: Lines 6: It is not clear where on the angle-measuring device the graduations are located.

Claim <sup>1</sup>12: Line 13: There is lack of antecedent basis in the specification for the clamping force of the coupler fastening the coupler to the stator, since the specification discloses that the clamping force of the coupler fastens the coupler to the stationary object.

Claims 2-11, 13-16, and 18 are objected due to their dependency on claims 1 and 17.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 8-11, 13-15, 17, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,758,427 to Feichtinger et al [hereinafter Feichtinger].

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Feichtinger discloses a measuring device for measuring an angular position of a stationary object (3) with respect to an object (5') that is rotatable around an axis of rotation (D), the device having:

a rotor (5) connected to the rotatable object,

a stator (10, 42, and 41) comprising a scanning unit for scanning a graduation (40) that moves with respect to the scanning unit,

a spring steel coupler fastened to the stator so as to seat the stator on the stationary object, the stationary object and the coupler each comprising a contact face extending transversely to the axis of rotation (tube outer surface and upper rim of 8a,b and 9a,b, respectively) wherein the coupler engages the contact face of the stationary object so that a clamping force (compression) is generated to fasten the coupler to the stationary object, the coupler being fixed against relative rotation but is radially or axially elastic. The coupler comprises a base (13-16) that is fastened on the stator, two diametrically oppositely located tongues (6,7) formed on the base for fastening to the stator, and two diametrically oppositely located tongues (8, 9) offset by 90° to the tongues that fasten to the stator for clamping against a gap/circumferential face (17) of the stationary object. The offset tongues have a wave-shaped (circular) bend positioned between the base and a clamping place so to clamp the coupler to the stationary object, or have the contact face fastened on a ring (see figures 1-3, 4, 6, 10, column 3, lines 18-46, column 4, lines 9-27, and column 5, lines 5-14).

With respect to claims 19 and 20, in utilizing the device disclosed by Feichtinger to measure the angular position of a stationary to a rotatable object, the method steps of claims 19 and 20 would inherently be followed.

*Allowable Subject Matter*

4. Claims 3, 7, 12, 16, and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and amended to overcome the objection(s) set forth in this Office action.

5. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or suggest an angular measuring device having a coupler with an area that is radially spread against an inner and an outer face of a stationary object (claim 3), and a rotor connected to a rotating object by an axially extending screw that provides axial displacement of the coupler (claims 16 and 18) in combination with the remaining limitations of the claims.

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents disclose couplings for assembling a scanning unit:

U.S. Patent 6,002,126 to Feichtinger

U.S. Patent 4,942,295 to Brunner et al

U.S. Patent 4,660,288 to Dangschat

U.S. Patent 4,386,270 to Ezekiel

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U.S. Patent 5,744,706 to Siraky

U.S. Patent 4,369,578 to Ernst

U.S. Patent 4,495,700 to Ernst

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mirellys Jagan whose telephone number is 703-305-0930. The examiner can normally be reached on Monday-Thursday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F Gutierrez can be reached on 703-308-3875. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7725 for regular communications and 703-308-7725 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

mj  
June 12, 2002



**Diego Gutierrez**  
**Supervisory Patent Examiner**  
**Technology Center 2800**